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Correspondence

Chest CT in coronavirus pandemic. Are there really age based radiological and clinical differences?

In the article written by Chen et al. titled “High-resolution computed tomography manifestations of COVID-19 infections in patients of different ages”, the authors talk about the new viral pandemic disease, and because of the important increase of cases around the world, many scientific groups worldwide are searching for clues and characteristic findings in every medical specialty to prevent, diagnose and treat effectively the patients and population. Actual evidence talks about worse prognosis in some groups of patients, those older than 60 years, and also persons with specific comorbidities (cardiovascular diseases, diabetes, pulmonary diseases, among others). One of the most commonly involved organs in COVID infection are the lungs, due to which, radiology has a very important place in the diagnosis and follow up. The two most common imaging techniques for the approach are thoracic X-ray and HRCT [1,3].

The researchers made a study comparing radiologic findings in people with different ages who developed COVID-19, concluding that the viral disease is less aggressive in younger persons without comorbidities than in people over 60 years and patients with chronic medical conditions. They also compare the pulmonary findings, and their extension to assess the grade of disease. The characteristics analyzed to classify the disease were: number of lesions, distribution, area involved, lesion size, lesion density and signs of air bronchogram. They also take on account mediastinal lymphadenopathies and pleural effusion [1].

This paper shows us a possible behavior of the viral sickness among different ages of the population. Nonetheless, we have the following concerns regarding it.

The statistical significance was analyzed with ANOVA analysis of variance, in which, every category must follow a normal distribution. Researchers did not analyze normality in every group and the size of them does not enable an adequate supposition of the central limit theorem. Thus, the statistical analysis is not appropriate to conclude its significance ($p < 0.05$) [2].

It would be desirable to know if the patients had any other comorbidities that may help explain the behavior of the infection in each

group.

We are also curious about the patient who had only one lesion and pleural effusion explained as an irritative response caused by the viral infection. Have researchers looked for any of the other differential diagnosis? Such findings are atypical for COVID infection, and, they might be better explained by cardiac failure or a community-acquired pneumonia.

Declaration of Competing Interest

None.

References

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